

REMARKS

The Office Action dated October 14, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

STATUS OF THE CLAIMS

Claims 1-17 and 19-21 are currently pending in the present application, of which claims 1, 15, and 19-20 are independent claims. Claims 1, 3, 5, 7-15, and 20 have been amended, and claims 22-38 have added, to more particularly point out and distinctly claim the subject matter of the present invention. No new matter has been added. Claim 1, upon which claims 2-5 and 7-14 depend, have been amended to incorporate subject matter that has been identified as allowable, and consequently claims 1-5 and 7-14 are *prima facie* in condition for allowance. Claims 6, 19, and 21 have been cancelled without prejudice or disclaimer. Claims 1-5, 7-17, 20, and 22-33 are respectfully submitted for consideration.

ALLOWABLE SUBJECT MATTER

Claim 6 was objected to as being dependent upon a rejected base claim, as well as for informalities, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, as well as amended to fix the informalities. The allowable subject matter from claim 6 has been included in pending independent claim 1. Pending claims 2-5 and 7-14 depend from, and

further limit, independent claim 1. Thus, each of dependent claims 2-5 and 7-14 also recites allowable subject matter.

Claims 11-13 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for these explicit indications of allowable subject matter. Applicants respectfully submit that the base claim from which claims 11-13 depend upon should also be allowed, as discussed below. Thus, it is respectfully requested that the objection to claims 11-13 be withdrawn.

CLAIM OBJECTIONS

Claims 5-6 and 19 were objected to because of informalities. Applicants have amended claims 5 as recommended by the Examiner (*see* Office Action at page 3) and have canceled claims 6 and 19. Thus, Applicants respectfully submit that the claim objections are now moot in view of the amendments. Reconsideration and allowance of claim 5 are therefore respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. 112

Claims 11-13 and 15-17 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Applicants have amended claims 11-13 to include the phrase “the first firewall” instead of the phrase “the firewall,” and have amended claim 15 as

recommended by the Examiner (*see* Office Action at page 2). Thus, Applicants respectfully submit that the claim rejections are now moot in view of the amendments. Reconsideration and allowance of claims 11-13 and 15-17 are therefore respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. 103

Claims 15-17 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Appln. S.N. 10/323,486 of Adrangi et al. (“Adrangi”) in view of U.S. Patent Appln. Pub. No. 2004/0120295 of Liu et al. (“Liu I”). Applicants respectfully traverse this rejection.

Claim 15, upon which claims 16-17 depend, is directed to a method including monitoring data directed to a mobile node so as to secure communication between the mobile node associated with a home network in a secure network and a correspondent node. The method also includes collecting data directed to the mobile node. The method further includes packaging the collected data in an internet-protocol-in-internet-protocol tunnel. The method additionally includes sending the packaged data to a virtual protocol network gateway for virtual protocol network encryption. The encrypted data is packaged in a virtual protocol network secure tunnel to an internal address of the mobile node to create virtual protocol network packaged data that is tunneled to a current address of the mobile node.

Claim 20 is directed to a computer program embodied on a computer readable medium. The computer program is configured to control a processor to perform

monitoring data directed to a mobile node so as to secure communication between the mobile node associated with a home network in a secure network and a correspondent node. The computer is also configured to perform collecting data directed to the mobile node. The computer program is further configured to perform packaging the collected data in an internet-protocol-in-internet-protocol tunnel. The computer program is additionally configured to perform sending the packaged data to a virtual protocol network gateway for virtual protocol network encryption. The encrypted data is packaged in a virtual protocol network secure tunnel to an internal address of the mobile node to create virtual protocol network packaged data that is tunneled to a current address of the mobile node.

Applicants respectfully submit that the combination of Adrangi and Liu I fail to disclose or suggest all of the features of any of the presently pending claims.

Adrangi generally relates to a method, apparatus and system that provide a seamless, secure roaming solution and that enable secure transmission of internet protocol (IP) packets across enterprise security gateways. According to one embodiment, a mobile node on an external network may register with an external home agent using an external home address. The mobile node may also establish a secure path to the security gateway using the external home address and an internal home address. The mobile node may thereafter use the secure path to correspond with nodes on the external network (*see* Adrangi at Abstract).

Liu I refers to systems and methods that provide a secure network path through an inner and outer firewall pair between a mobile node on a foreign network and a

corresponding node on a home network. The systems and methods include providing a mobile IP proxy between the mobile node and a virtual protocol network gateway (VPN) inside the firewalls. The mobile IP proxy acts as a surrogate home agent to the mobile, and acts as a surrogate mobile node to a home agent residing on the home network (*see* Liu I at Abstract).

Applicants respectfully submit that the combination of Adrangi and Liu I does not disclose or suggest all of the features of any of the presently pending claims. Specifically, the combination of Adrangi and Liu I fails to disclose or suggest that “the encrypted data is packaged in a virtual protocol network secure tunnel to a **permanent address, located in the secure network**, of the mobile node,” as recited in claims 15 and 20 (emphasis added).

The Office Action took the position that this feature is disclosed by Adrangi at paragraphs [0026]-[0028] and Figure 4 (*see* Office Action at page 5). In part of the cited portion, Adrangi states, “VPN gateway ... encrypts the packet and sends the packet to MN_Hx” (*see* Adrangi at paragraph [0028], lines 13-14). The MN_Hx is a mobile node’s **home address on a home agent located external to a corporate intranet** (*see* Adrangi at paragraph [0020], lines 3-6, and paragraph [0023], lines 9-10). Adrangi refers to the MN_Hx in a tunnel of the VPN gateway (*see, e.g.,* paragraph [0029], lines 7-9, and Figure 6, reference number 604).

However, Adrangi does not disclose or suggest that the encrypted packet is packaged in a virtual protocol network secure tunnel to a **permanent address, located in the secure network** (*i.e.,* the corporate intranet), of the mobile node. Instead,

Adrangi refers to the mobile node's invariant home address on a home agent located on the corporate intranet ("MN_Hi") only in an IP packet, not in a virtual protocol network secure tunnel (*see, e.g.*, Adrangi at paragraph [0020], line 3-5, paragraph [0024], lines 8-12, paragraph [0029], line 4, and Figure 6, reference number 601). Accordingly, Adrangi fails to disclose or suggest that encrypted data is packaged in a virtual protocol network secure tunnel to a permanent address, located in a secure network, of a mobile node. As stated in the present application, "the VPN session established is created between the VPN gateway and the permanent address of the mobile node ... the VPN packet contains ... an [encapsulating security payload (ESP)] field ... and routing information to the permanent address of the mobile node from the VPN" (*see* Specification at page 10, lines 7-12, and Figure 1B, reference number 220). Thus, the IP packet of Adrangi cannot correspond to the VPN packet of the claimed invention because the IP packet does not contain an ESP field and routing information to the MN_Hi from the VPN gateway (*see, e.g.*, Adrangi at Figure 6, reference number 601).

Liu I does not cure these deficiencies in Adrangi. As discussed above, Liu I refers to a secure network path through an inner and outer firewall pair between a mobile node on a foreign network and a corresponding node on a home network. However, Liu I fails to disclose or suggest that encrypted data is packaged in a virtual protocol network secure tunnel to a permanent address, located in the secure network, of the mobile node. Accordingly, Liu I does not disclose or suggest that that encrypted

data is packaged in a virtual protocol network secure tunnel to a permanent address, located in a secure network, of a mobile node.

Thus, the combination of Adrangi and Liu I fails to disclose or suggest that “the encrypted data is packaged in a virtual protocol network secure tunnel to a permanent address, located in the secure network, of the mobile node,” as recited in claims 15 and 20.

For at least the reasons discussed above, Applicants respectfully submit that the combination of Adrangi and Liu I does not disclose or suggest all of the elements of claims 15 and 20. Accordingly, Applicants respectfully request that the rejection of claims 15 and 20 be withdrawn.

Claims 16-17 depend from, and further limit, claim 15. Thus, each of claims 16-17 recite subject matter that is neither disclosed nor suggested in the combination Adrangi and Liu I. It is, therefore, respectfully requested that the rejections of claims 16-17 be withdrawn.

Claims 1-5, 7-10, 14, 19, and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Adrangi in view of Liu I and further in view of U.S. Patent Appln. Pub. No. 2003/0212900 of Liu et al. (“Liu II”) and U.S. Patent Appln. Pub. No. 2003/0093553 of Le et al. (“Le”). This rejection is moot and should be withdrawn in view of the amendments provided above, which either incorporate allowable subject matter into each of the rejected claims or cancel the rejected claims without prejudice or disclaimer. Consequently, withdrawal of the rejection is respectfully requested.

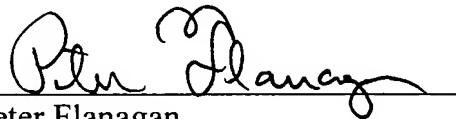
CONCLUSION

For the reasons explained above, it is respectfully submitted that each of claims 1-5, 7-17, 20, and 22-33 recite subject matter that is neither disclosed nor suggested in the cited art. It is, therefore, respectfully requested that all of claims 1-5, 7-17, 20, and 22-33 be allowed, and that this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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